

47—700 Removal and installation of fuel tank

Filling capacities in liters

| Model | 107 | 116 | 123.03/05 | 123.09 | 126 |
|------------------------|--------------|------------|--------------|------------|--------------|
| Full readout | approx. 85 | approx. 96 | approx. 80 | approx. 70 | approx. 90 |
| Warning lamp — reserve | approx. 11,5 | approx. 13 | approx. 11,5 | approx. 11 | approx. 12,5 |

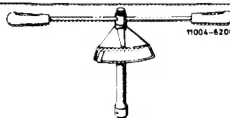
Tightening torques

Nm

| | | | |
|--|-------|-------|-------|
| Fastening screws or fastening nuts for fuel tank | 17–25 | 26–34 | 17–25 |
| Immersion tube transmitter | 35–43 | | |
| Fuel strainer | | | |
| Suction hose | 24–32 | | |
| Return hose | | | 31–39 |

Special tool

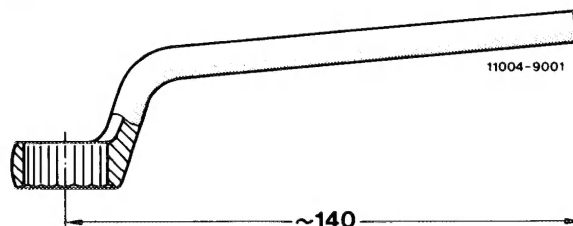
Torque wrench, double-arm,
15–63 Nm



00 589 27 21 00

Self made tool — model 126

Conventional, offset box-end wrench
(SW 19), length according to drawing



Attention!

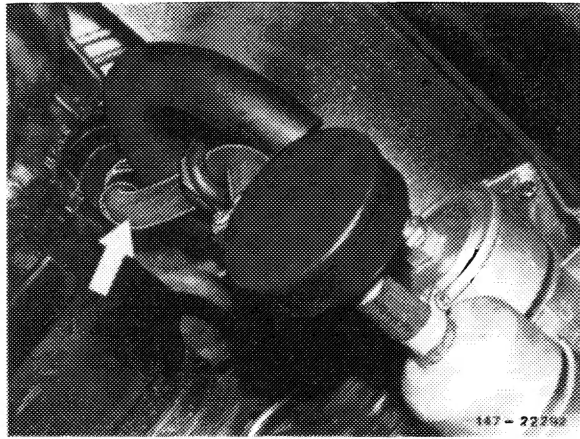
When removing fuel tank, pay attention to safety rules.

Removal

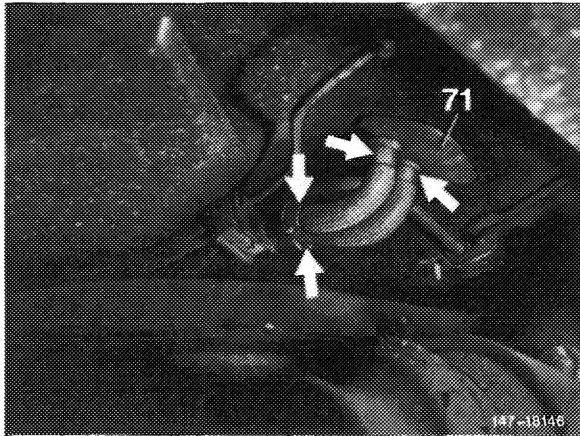
- 1 Disconnect grounding line on battery.
- 2 Drain fuel tank. Carefully pump out fuel, so that no residual fuel remains in fuel tank.

3 Loosen suction hose, fuel return hose and vent hose. Catch residual fuel from hoses. Close hoses and connections.

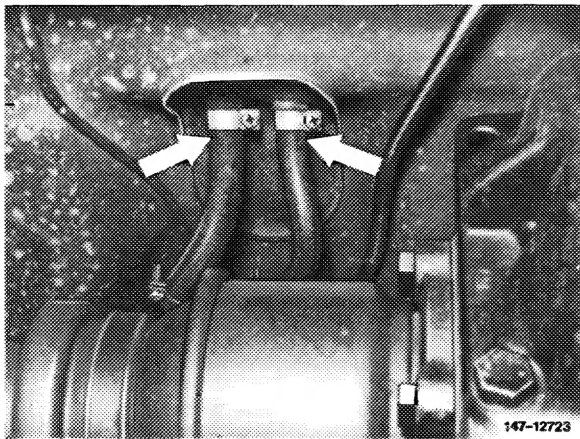
Model 107, 116, 123
Suction hose



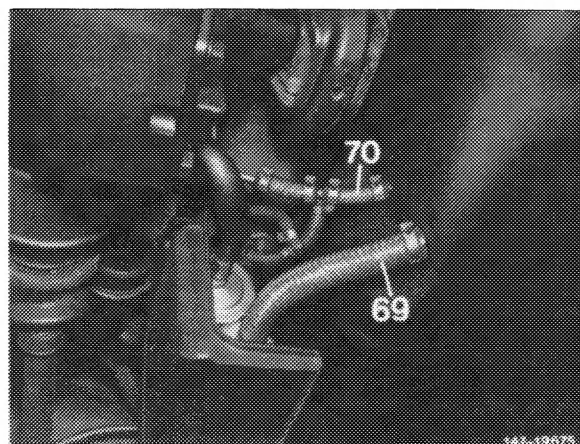
Model 107.02
Vent and return flow hose



Model 116, 123.03/05
Vent and return flow hose

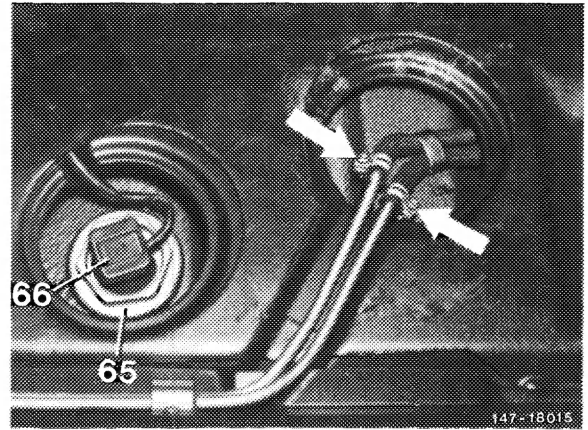


Model 123.09
69 Suction hose
70 Return flow hose



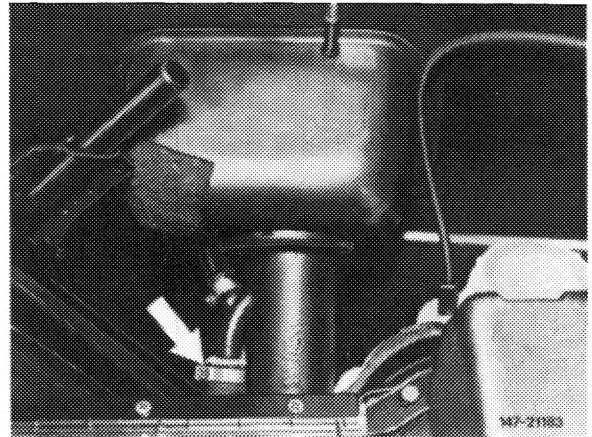
4 On T-sedan, remove luggage compartment floor and intermediate compartment. Pull off vent hoses (arrows) and coupling (66).

Model 123.09

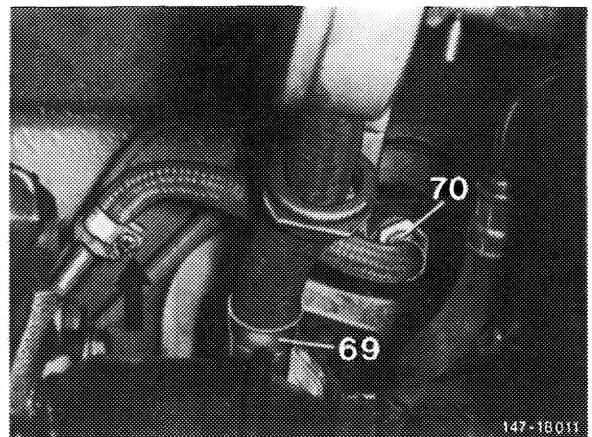


5 Loosen hose clamp (arrow) and pull off vent hose. Close hose and pipe connection.

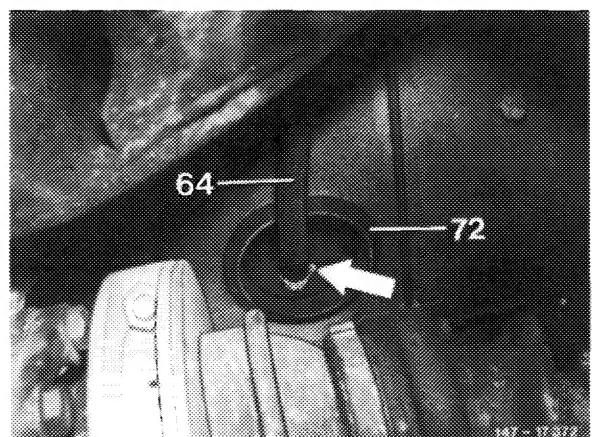
Model 123.09
Vent hose



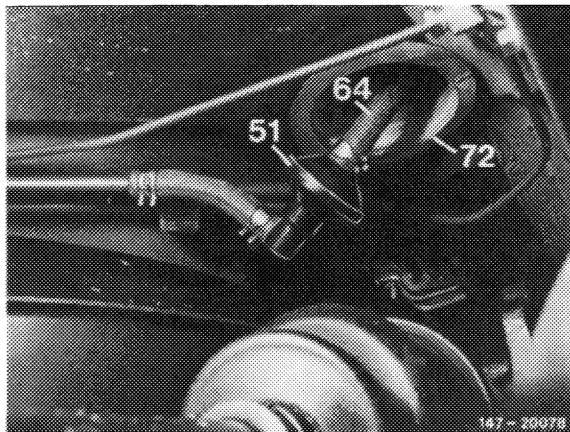
Model 126
69 Suction hose
70 Return flow hose



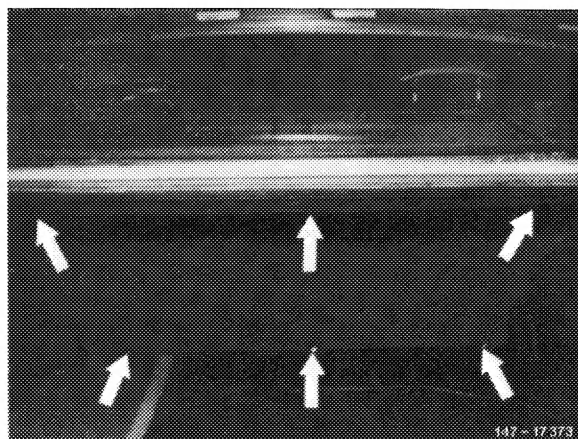
Model 126
64 Vent hose



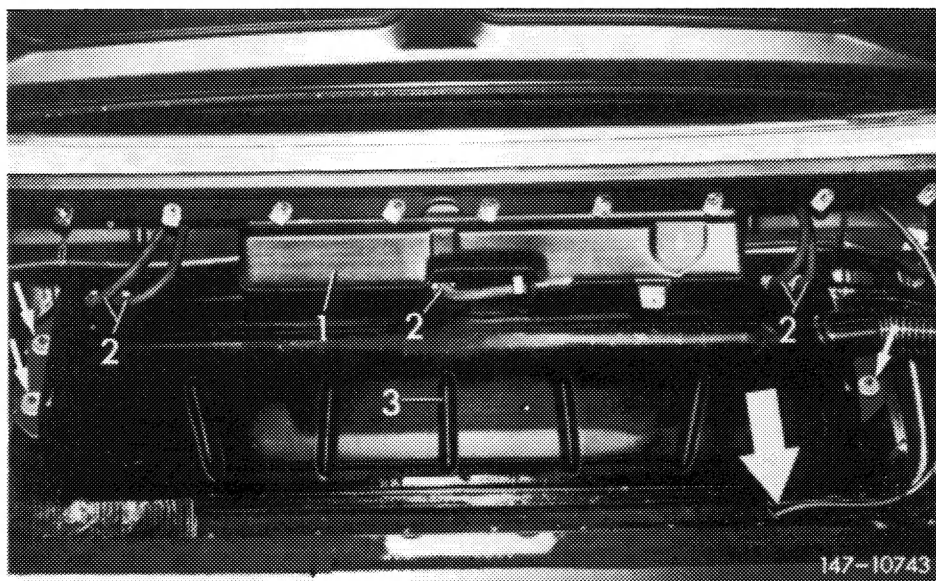
Model 126 (J)
 51 Vent valve
 64 Vent hose
 72 Sealing sleeve



- 6 Remove luggage compartment mat.
- 7 Unscrew rear wall and remove.
- 8 On model 107.04, remove fuel expansion tank (1) (47-705).



Model 107.04
 1 Fuel expansion tank
 2 Fuel hoses
 3 Fuel tank
 Arrow = Vent line

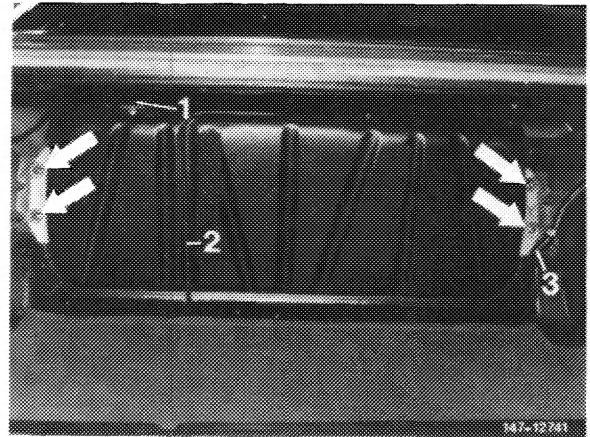


9 Unscrew fastening nuts.

10 Slightly pull out fuel tank and pull off coupling for fuel readout on immersion tube transmitter.

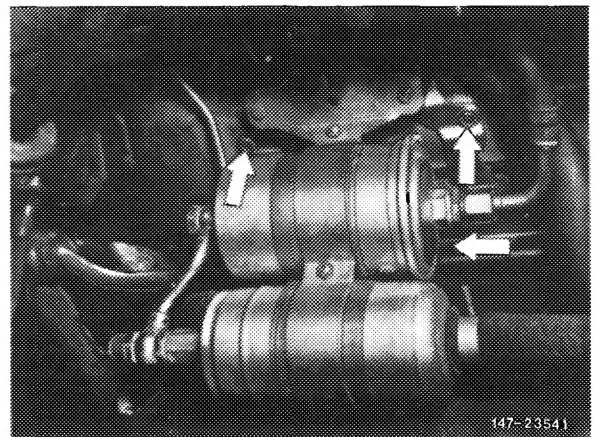
11 Remove fuel tank.

1 Coupling immersion tube transmitter
Arrows = Fastening nuts



Note: On T-sedans, for removing fuel tank remove protective casing for pump assembly. Then unscrew the three fastening screws (arrows) for combination holder pump assembly/fuel tank. Disconnect harness for fuel pump at edge of fuel tank.

Model 123.09



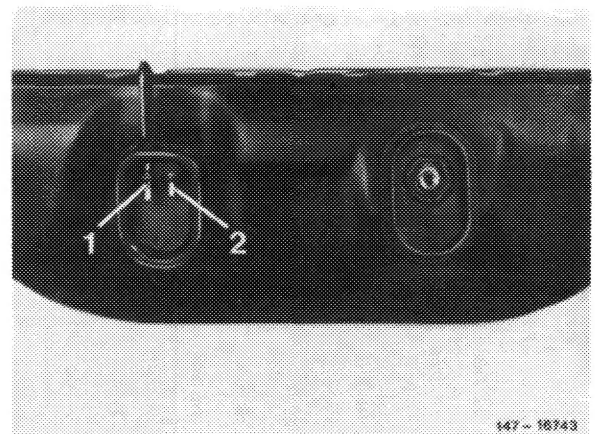
Installation

12 Install fuel tank in vice versa sequence, proceed as follows:

a) Glue both gaskets to bottom of fuel tank by means of MB universal glue, part No. 000 989 92 71. For installation, coat both gaskets on sealing surface or bead with sliding compound (talcum, wax or the like).

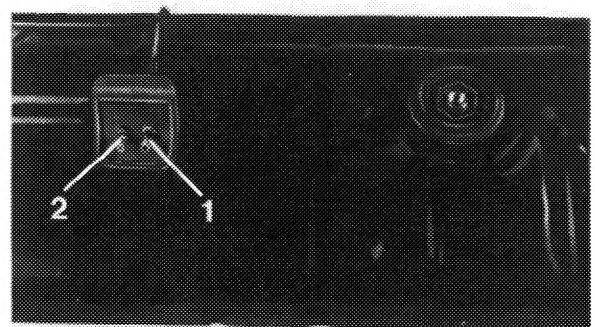
Model 107.02/123

1 Positive and negative vent line
2 Return flow line



Model 116

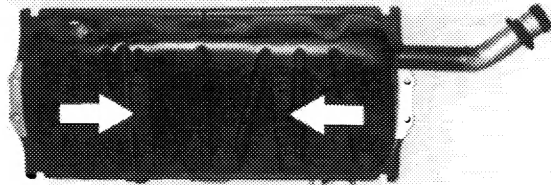
1 Positive and negative vent line
2 Return flow line



b) Check whether foam rubber strip on fuel tank is rigidly attached and glue down with MB universal glue, part No. 009 989 02 71, if required.

c) On model 123.09, glue foam rubber strips on fuel tank at level of filler neck crosswise to driving direction.

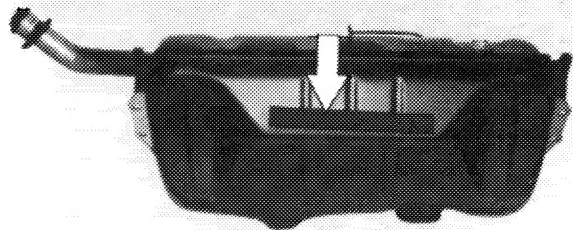
Note: Never use felt or similar material, since otherwise corrosion damage may occur.



147-16857

d) Blow out strainer (b) and check for damage. Renew sealing ring (a). Install fuel strainer (68) and tighten to 35–43 Nm.

Note: The strainer jacket (b) comprises a square mesh fabric with 0.1 mm mesh width. To prevent mixups, the word "Benzin" (gasoline) is printed on metal section.



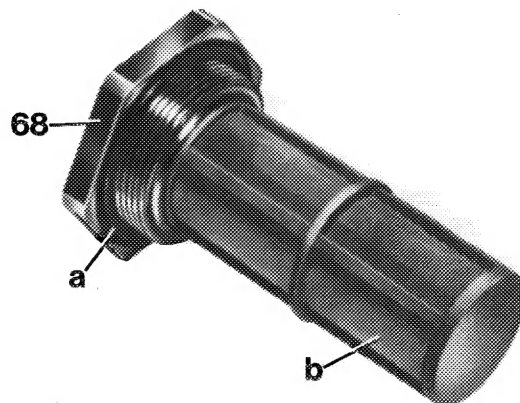
147-16856

e) Install fuel tank with specified reinforcing sheet metal and washers. Tighten fastening nuts to 17–25 Nm.

On model 123.09, tighten self-locking fastening nuts to 26–34 Nm.

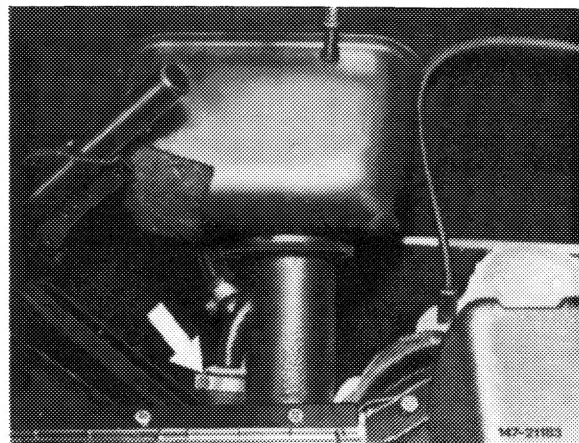
f) Install vent hose (arrow) between fuel tank and filler neck free of kinks and with a continuous slope toward fuel tank. The slipped-on O-ring serves for sealing at passage toward interior.

g) Pay attention to correct seat of sleeves on filler neck.



147-17012/1

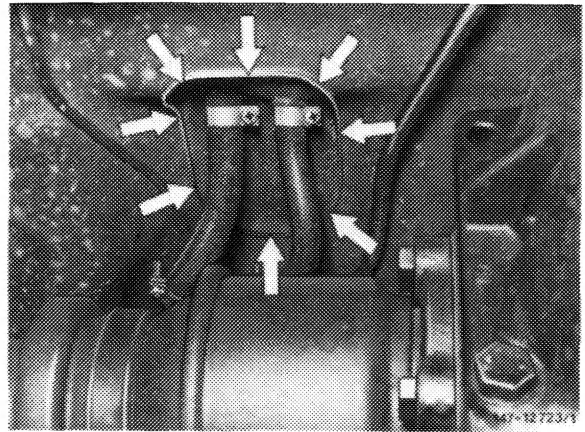
Model 123.09



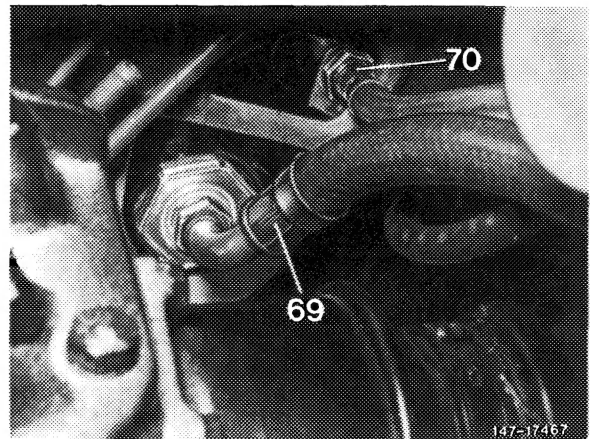
147-21883

h) On model 123, check seal between fuel tank and rear floor and seal again, if required. For this purpose, carefully apply Unionzement by means of a brush or the like against circumference of opening (arrows).

i) Check fuel hoses and renew, if required.



j) On model 126, renew copper seal between fuel tank and return flow hose (70).

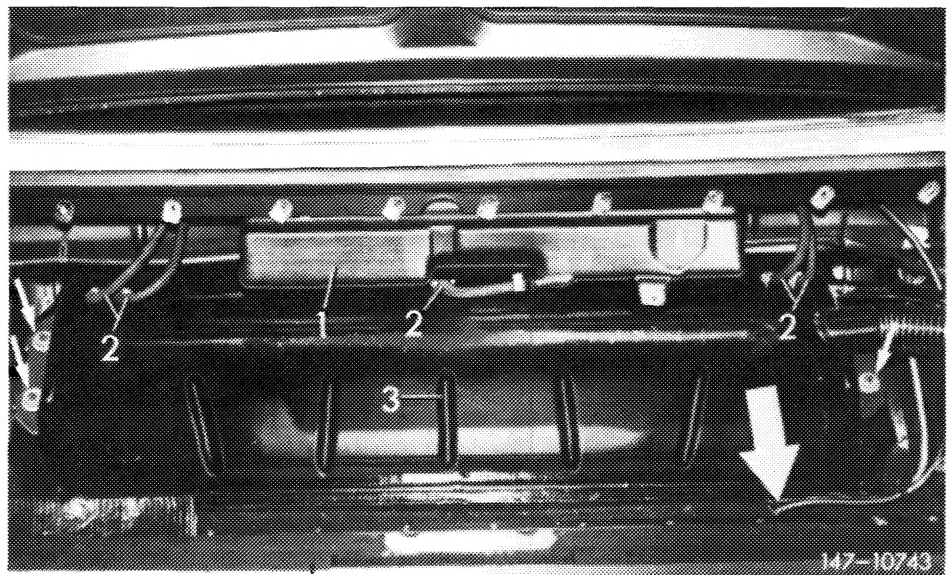


Model 126

k) For installing expansion tank on model 107.04, install vent line behind filler neck first.

l) When tightening hose clamps, apply counterhold to connections of expansion tank.

m) Plug on protective sleeve at end of vent line.



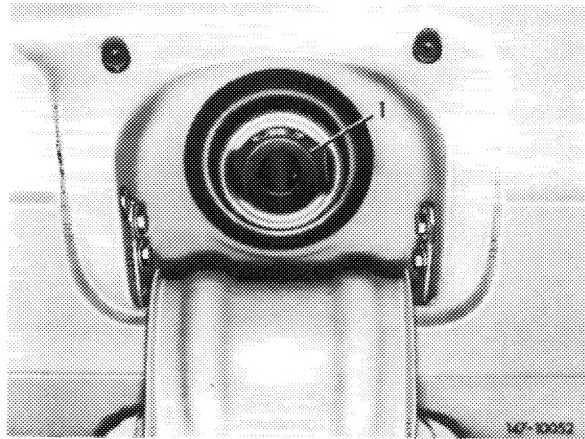
- 1 Fuel expansion tank
- 2 Fuel hoses
- 3 Fuel tank
- Large arrow = Vent line

n) Check function of fuel readout (ground connection on battery connected).

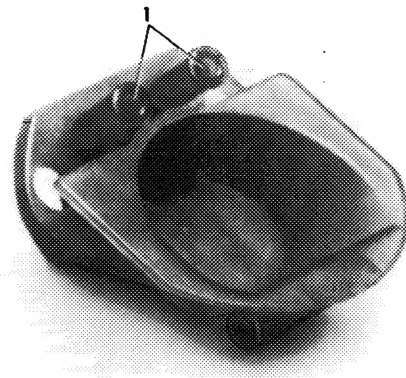
o) Check fuel system for leaks.

USA starting 1977

On these vehicles a guide funnel (1) is installed in filler neck to accommodate the small fuelling guns for lead-free fuel.

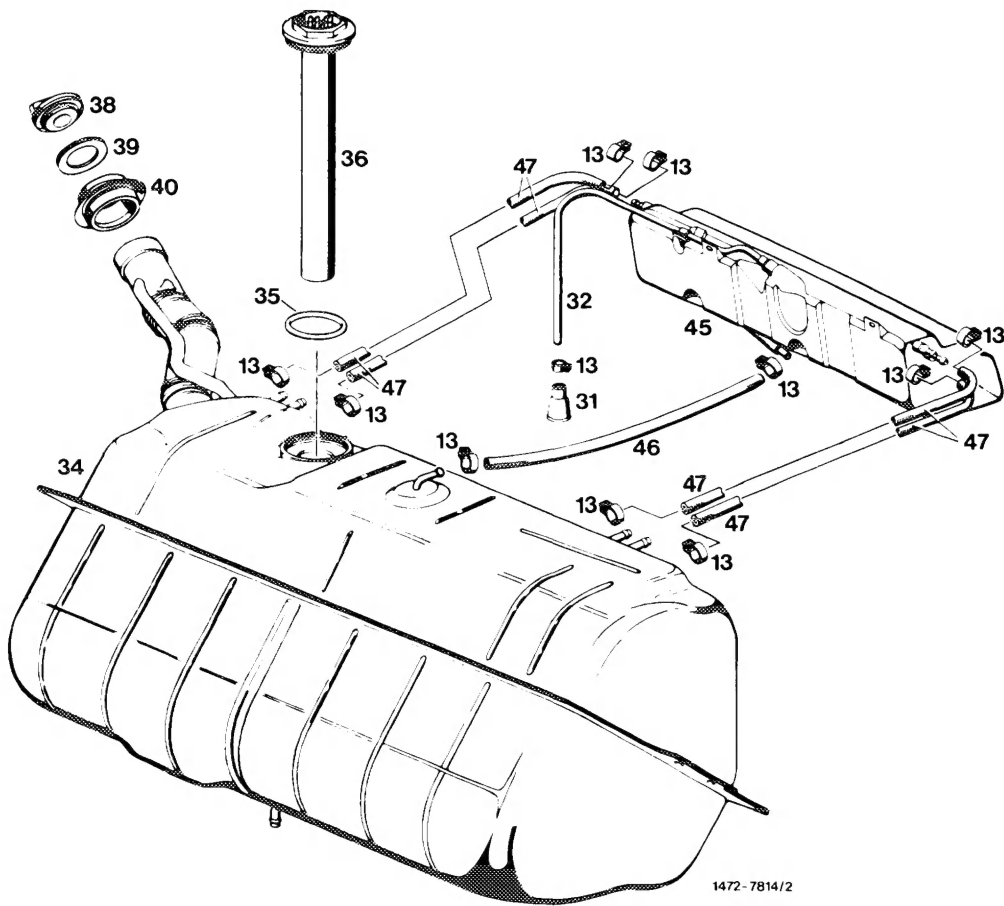


If a fuel tank on these vehicles is renewed, simultaneously install a guide funnel **in USA vehicles only**. For this purpose, prior to assembly of fuel tank, insert guide funnel into filler neck and knock in fastening rivet (1) up to stop by means of a mandrel.



Fuel tank positive and negative venting lines

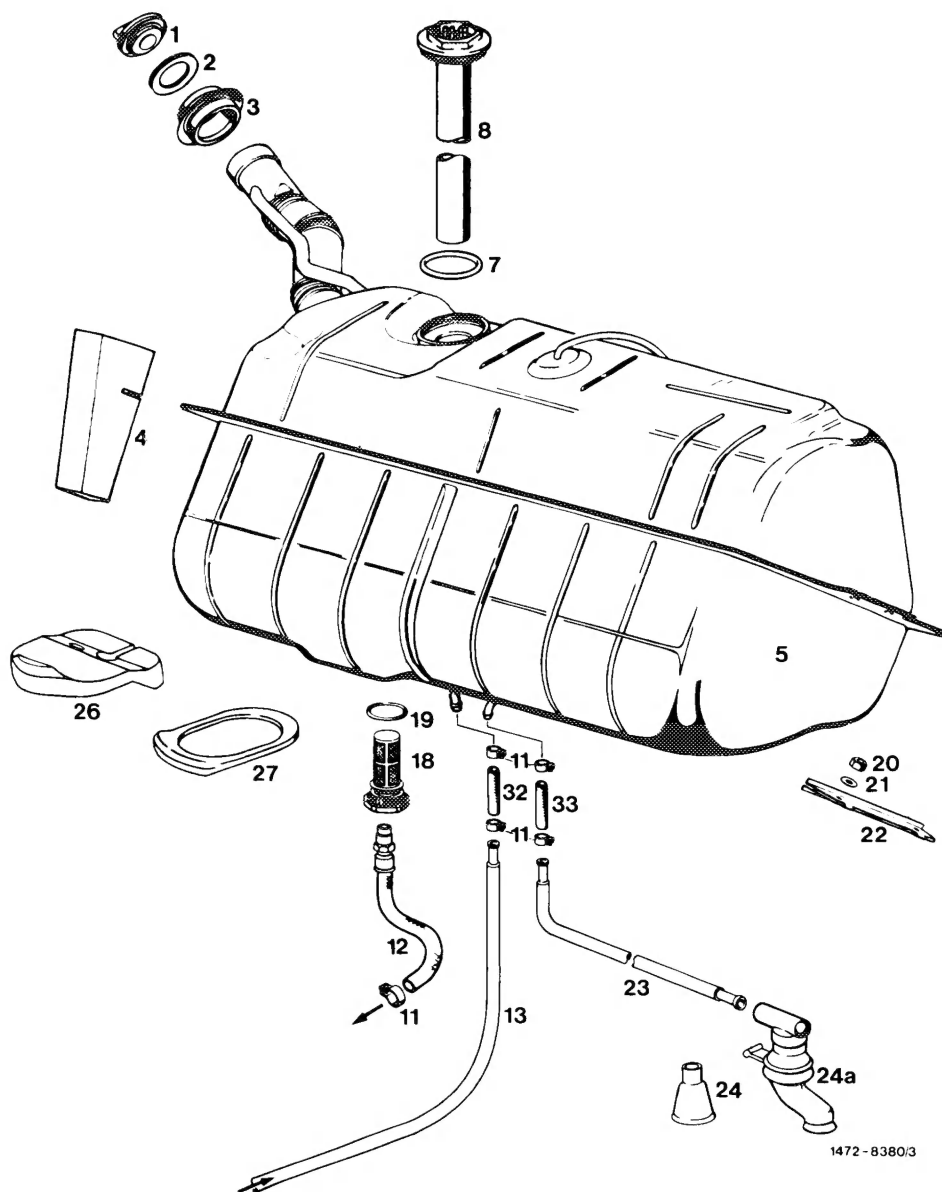
Model 107.04



- | | | | |
|----|----------------------------|----|----------------|
| 13 | Hose clamps | 38 | Closing cap |
| 31 | Protective sleeve | 39 | Seal |
| 32 | Vent line | 40 | Rubber grommet |
| 34 | Fuel tank | 45 | Expansion tank |
| 35 | Sealing ring | 46 | Fuel hose |
| 36 | Immersion tube transmitter | 47 | Fuel hose |

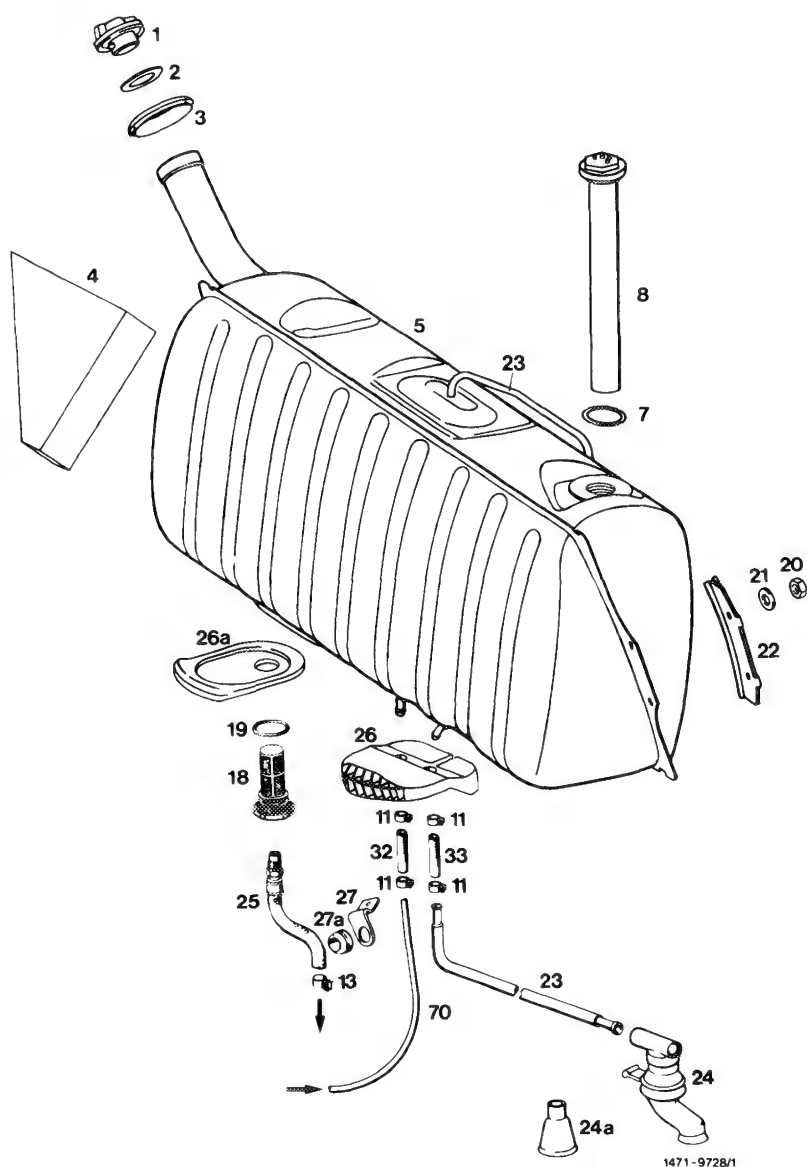
Fuel tank

Model 107.02, 116



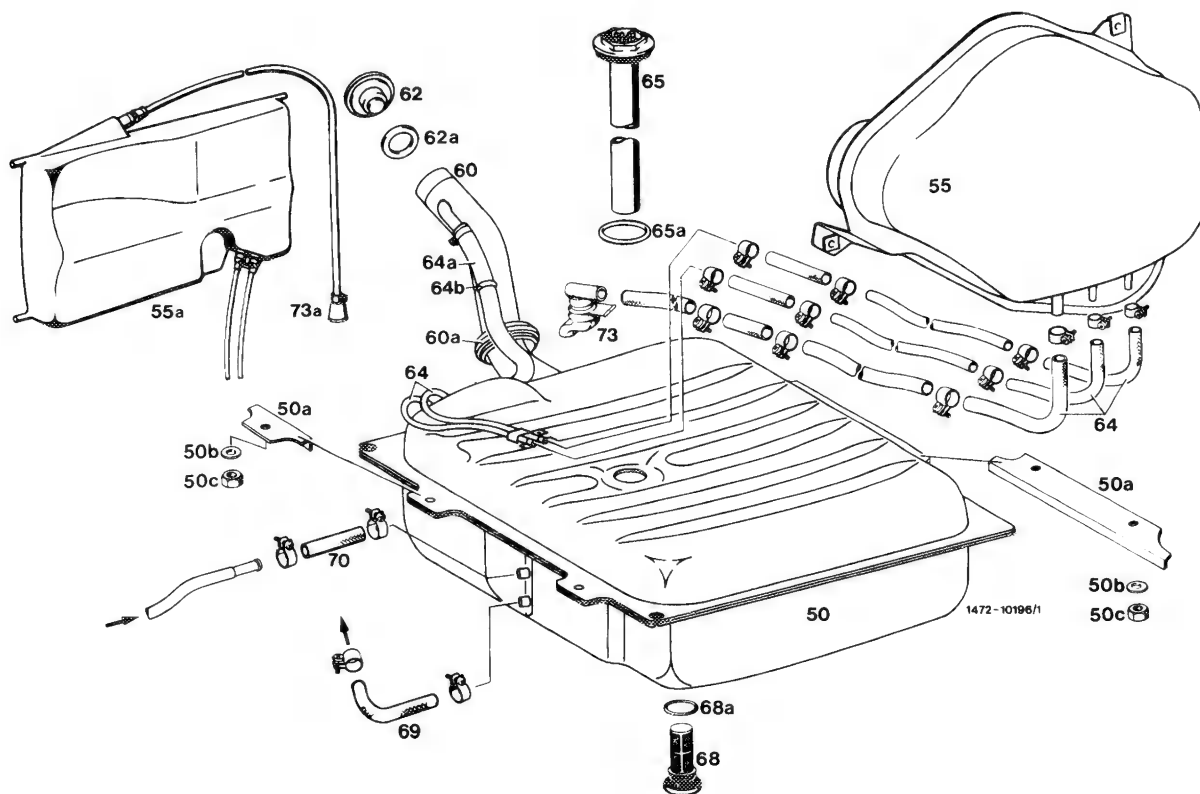
- | | | |
|------------------------------|----------------------|-----------------------------|
| 1 Filler cap | 12 Fuel feed | 24 Vent sleeve 1st version |
| 2 Seal | 13 Fuel return flow | 24a Vent sleeve 2nd version |
| 3 Rubber sleeve | 18 Fuel strainer | 26 Rubber gasket |
| 4 Damping shim | 19 Sealing ring | 27 Rubber gasket |
| 5 Fuel tank | 20 Nut | 32 Fuel hose |
| 7 Sealing ring | 21 Washer | 33 Fuel hose |
| 8 Immersion tube transmitter | 22 Reinforcing strip | |
| 11 Hose clamp | 23 Vent line | |

Fuel system, fuel tank positive and negative vent lines
Model 123 sedan and coupe



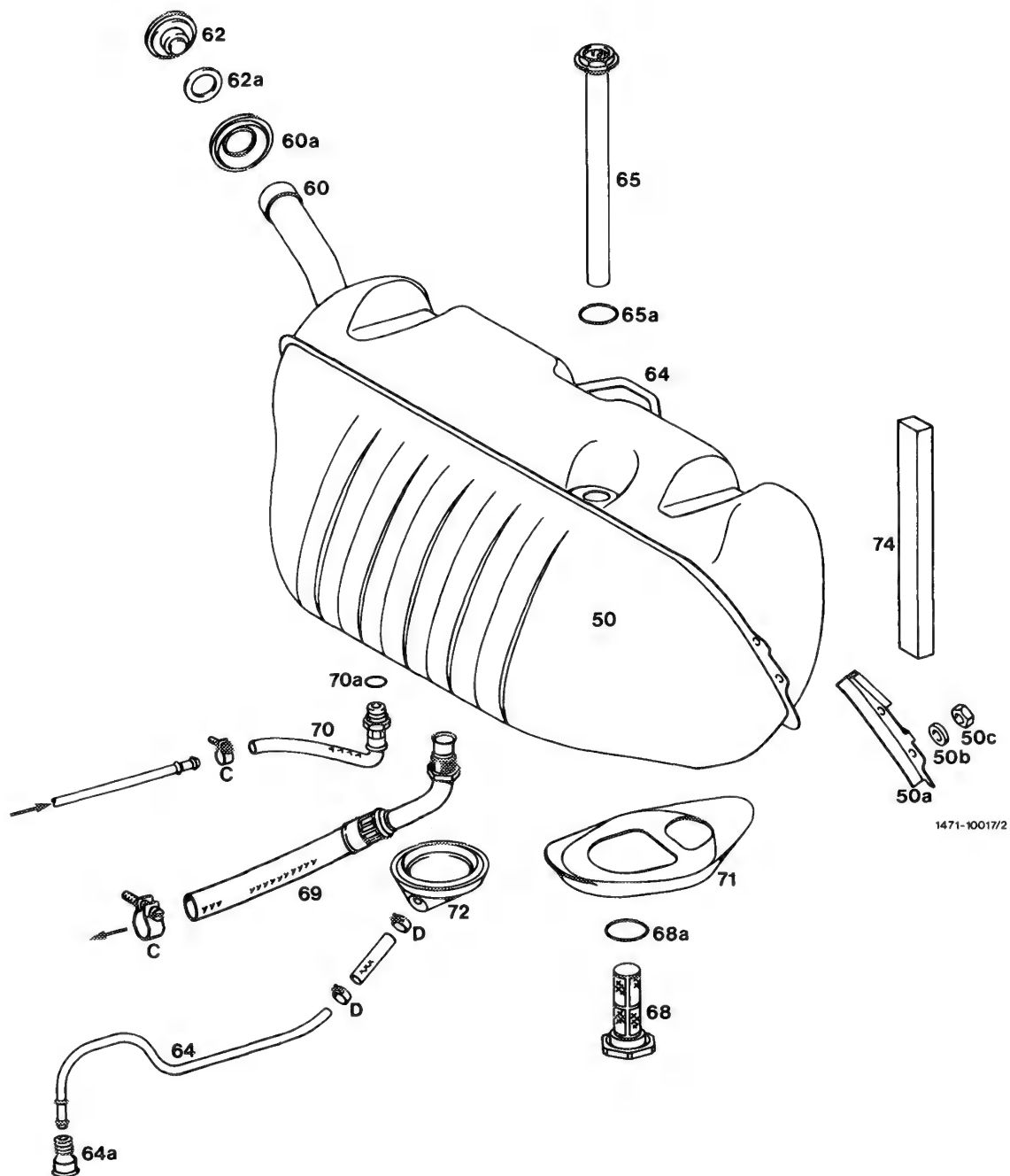
- | | | |
|------------------------------|-------------------------------|--------------------------|
| 1 Filler cap | 18 Fuel strainer | 26 Rubber gasket |
| 2 Seal | 19 Sealing ring | 26a Rubber gasket |
| 3 Rubber sleeve | 20 Nut | 27 Holder |
| 4 Damping shim | 21 Washer | 27a Grommet |
| 5 Fuel tank | 22 Reinforcing strip | 32 Fuel hose |
| 7 Sealing ring | 23 Vent line | 33 Fuel hose |
| 8 Immersion tube transmitter | 24 Vent sleeve (2nd version) | 70 Fuel return flow line |
| 11 Hose clamp | 24a Vent sleeve (1st version) | |
| 13 Hose clamp | 25 Fuel suction hose | |

Fuel system, fuel tank positive and negative vent lines
Model 123 T-sedan and special vehicles with special body



- | | | |
|------------------------------------|-------------------------------|-----------------------------------|
| 50 Fuel tank | 60 Filler neck | 68 Fuel strainer |
| 50a Reinforcing sheet metal | 60a Sealing sleeve (2 each) | 68a Sealing ring |
| 50b Washer | 62 Closing cap | 69 Feed |
| 50c Nut, self-locking | 62a Sealing ring | 70 Return flow |
| 55 Expansion tank | 64 Vent lines | 73 Vent sleeve 2nd version |
| T-sedan and 2nd version | 64a Vent line | 73a Protective sleeve 1st version |
| Special vehicles with special body | 64b Sealing ring | |
| 55a Expansion tank 1st version | 65 Immersion tube transmitter | |
| Special vehicles with special body | 65a Sealing ring | |

**Fuel tank
Model 126**



1471-10017/2

50 Fuel tank
50a Reinforcing sheet metal
50b Shim
50c Nut
60 Filler neck
60a Sealing sleeve
62 Closing cap

62a Sealing ring
64 Vent line
64a Protective sleeve
65 Immersion tube transmitter
65a Sealing ring
68 Fuel strainer
68a Sealing ring

69 Suction hose
70 Return flow line
70a Copper sealing ring
71 Gasket
72 Sealing sleeve
74 Damping shim

47—700 Removal and installation of fuel tank

A. Model 114

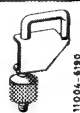
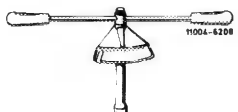
Filling capacity in liters

| | (J) (S) (USA) 1973/74 | (USA) 1975/76 |
|------------------------------|-----------------------|---------------|
| Full readout | 65 | 78 |
| Warning lamp reserve approx. | 9 | 9 |

Tightening torques

| | Nm | (kpm) |
|------------------------------|-------|-----------|
| Fastening nuts for fuel tank | 20–25 | (2–2.5) |
| Self-locking fastening nuts | 26–34 | (2.6–3.4) |
| Fuel drain plug | 35–43 | (3.5–4.3) |

Special tools

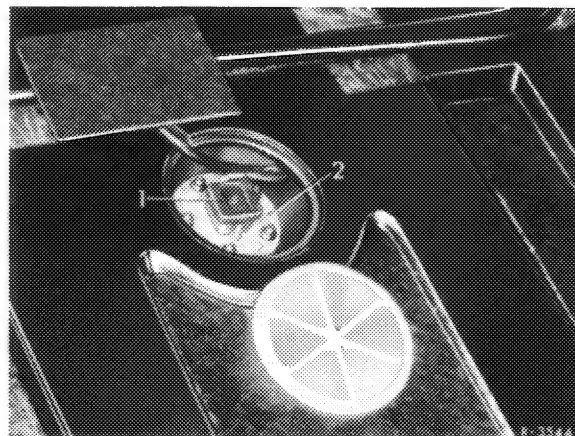
| | | |
|---|--|------------------|
| Clamp for fuel hose |  | 000 589 40 37 00 |
| Torque wrench, double arm, 1/2" square, 15–65 Nm (150–650 kpcm) |  | 000 589 27 21 00 |
| Torque wrench, double arm, 1/4" square, 4–16 Nm (40–160 kpcm) | | 000 589 67 21 00 |

Attention!

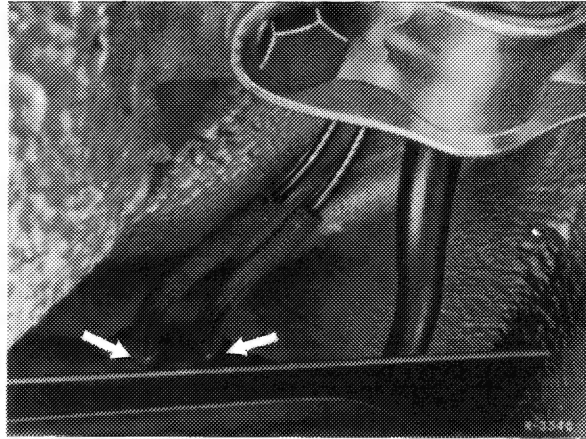
When removing fuel tank, pay attention to safety rules.

Removal

- 1 Disconnect ground line on battery.
- 2 Drain fuel tank while unscrewing fuel drain plug (4 in fig. item 5).
- 3 Pull coupler (1) for fuel readout from immersion tube transmitter (2).

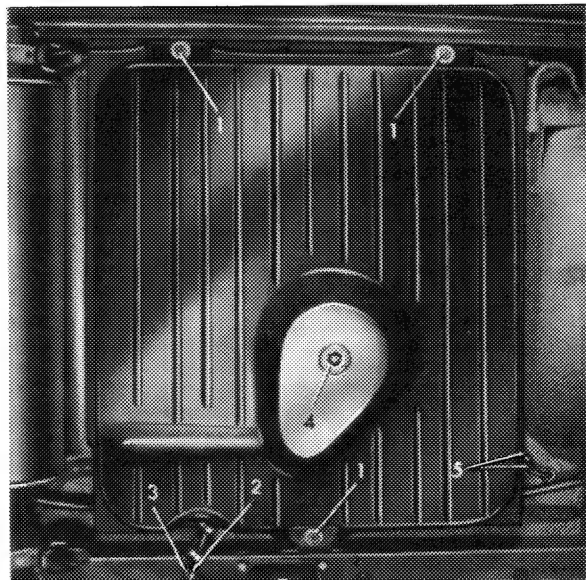


4 Pull off positive and negative venting line on fuel tank (arrows).



5 Pinch fuel hoses (2 and 3) with a clamp. Loosen hose clips and pull fuel hoses from fuel tank.

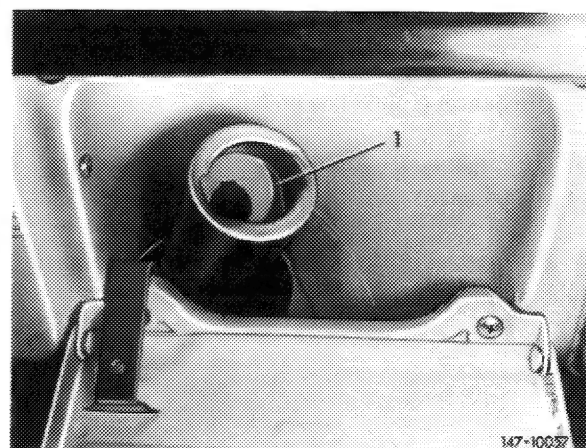
6 Loosen fastening nuts (1) and remove fuel tank.



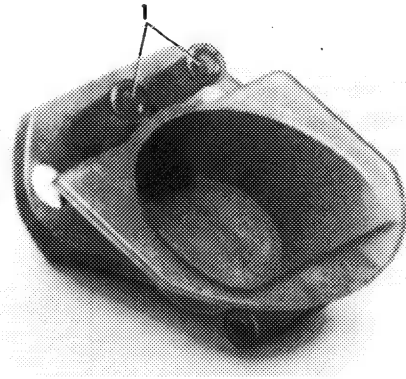
Installation

USA 1975/76

Due to the small fuelling guns for lead-free fuel (catalyst operation) on these vehicles, specified in the USA starting model year 1975, a guide funnel (1) is installed in filler neck.



If a fuel tank is replaced on these vehicles, install a guide funnel **in the USA only**. For this purpose, place guide funnel into filler neck prior to installation of fuel tank and knock-in fastening rivets up to stop by means of a punch.



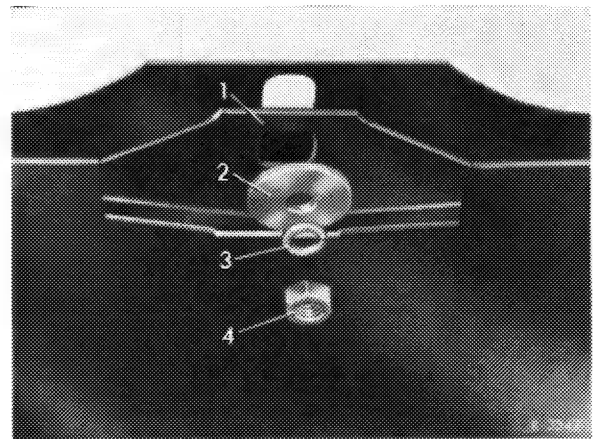
1 Fastening rivets

147-10021

Install fuel tank in reverse order. Pay attention to the following items:

7 Mount fuel tank with reinforcing panels (1) and washers (2) provided.

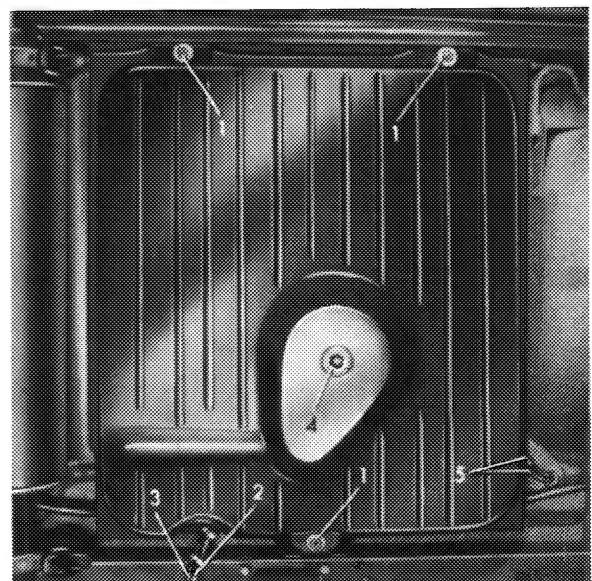
If the reinforcing panels are left out or the washers used are too small, the holding brackets on fuel tank may be torn off.



8 Check whether foam rubber strips on fuel tank are tight and glue down with MB universal glue part no. 000 989 92 71, if required.

Note: Never use felt or similar material, since this may lead to corrosion damage.

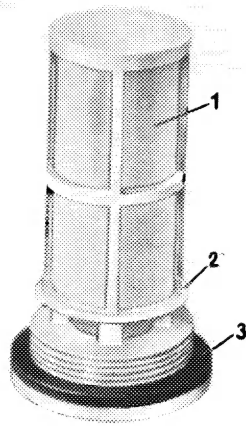
9 Tighten the three fastening nuts (1) to 20–25 Nm (2–2.5 kpm). When using self-locking nuts, tighten to 26–34 Nm (2.6–3.4 kpm).



10 Blow out strainer jacket (1) of fuel drain plug and check for damage. Install closing plug and tighten to 35–43 Nm (3.5–4.3 kpm).

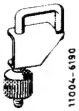
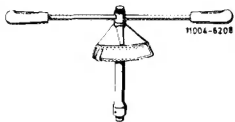
Note: The filter is made of square mesh fabric of 0.1 mm mesh width. To prevent mixing up closing plug, the word “diesel” is punched-in on diesel engines.

11 Connect ground line to battery. Check function of fuel readout.



R-1330

B. Model 116

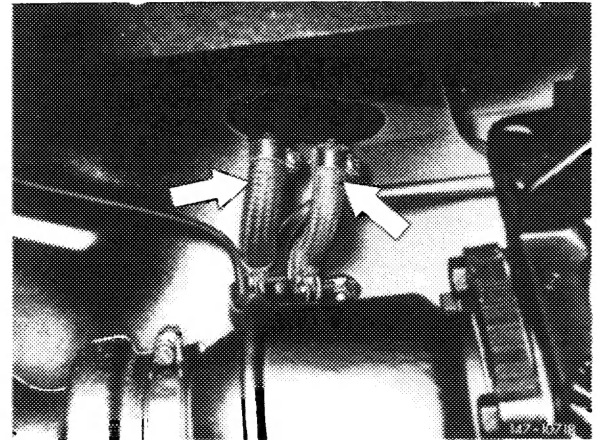
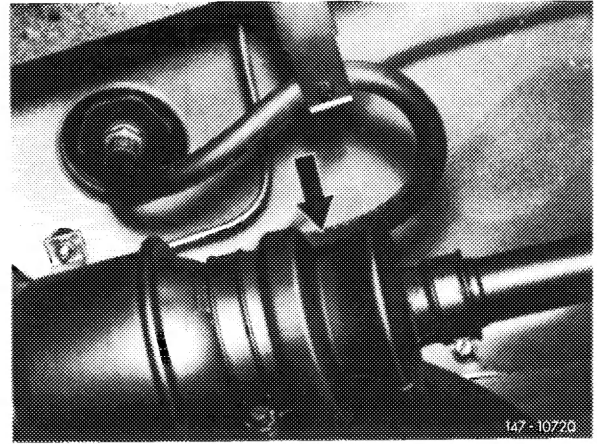
| | | |
|---|---|------------------|
| Full readout | approx. 96 | |
| Warning lamp – reserve | approx. 13 | |
| Tightening torques | Nm | (kpm) |
| Fastening nuts for fuel tank | 17–25 | (1.7–2.5) |
| Immersion tube transmitter | 19–27 | (1.9–2.7) |
| Special tools | | |
| Clamp for fuel hose |  | 000 589 40 37 00 |
| Torque wrench, double arm, 1/2" square 15–65 Nm (150–650 kpcm) |  | 000 589 27 21 00 |

Attention!

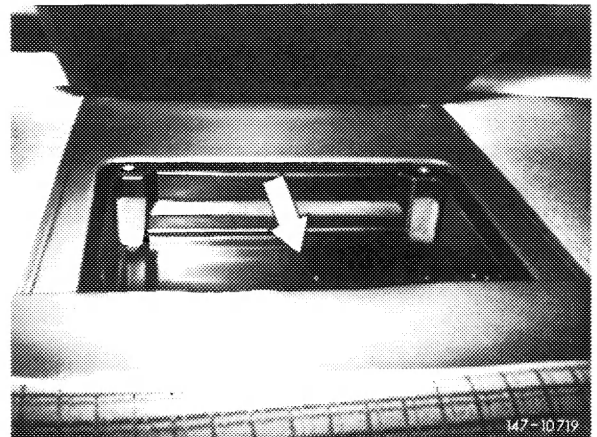
When removing fuel tank, pay attention to safety rules.

Removal

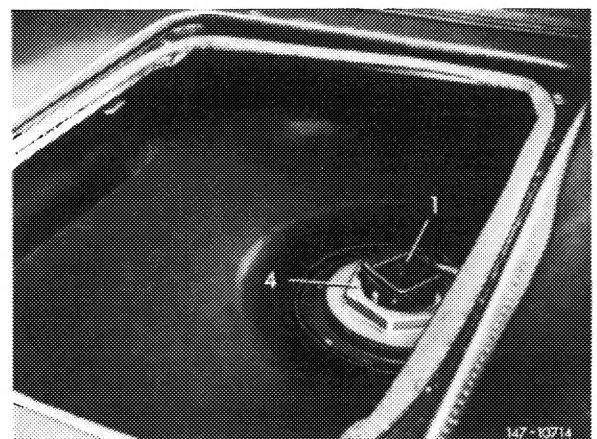
- 1 Disconnect ground line on battery.
- 2 Drain fuel tank. For this purpose, pinch fuel suction hose (arrow) with clamp. Loosen hose clamp on fuel feed line, pull off hose and drain fuel.
- 3 Loosen hose clamps on fuel return hose and fuel tank vent hose (arrows) and pull hoses from fuel tank.



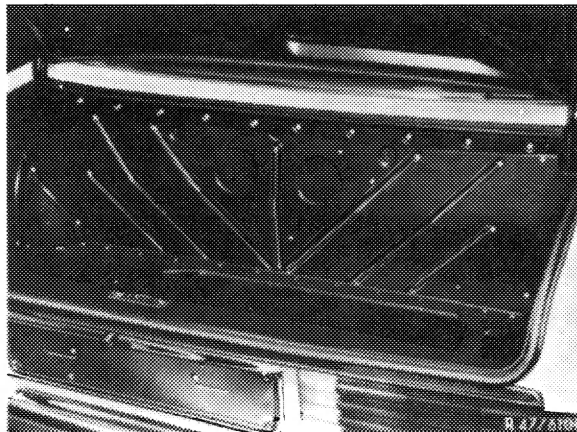
- 4 Remove first aid kit and first aid kit mounting tray (arrow).



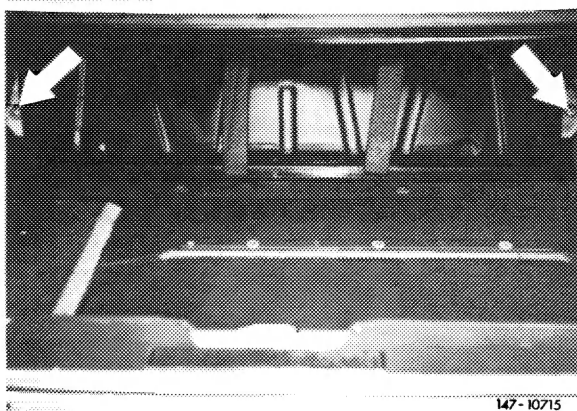
- 5 Pull coupler (1) for fuel readout from immersion tube transmitter (4) and protect against slipping off with a wire.



6 Remove rear wall for fuel tank cover.



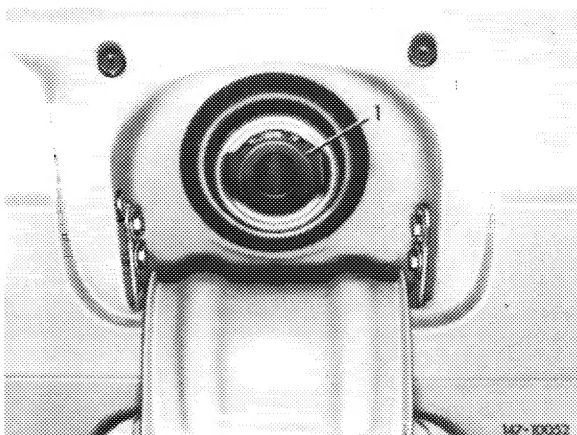
7 Unscrew fuel tank fastening nuts (arrows) and remove fuel tank.



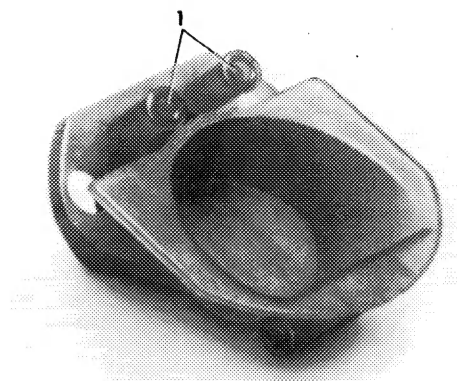
Installation

USA 1975/76 only

Due to the small fuelling guns for lead-free fuel (catalyst operation) on these vehicles, specified in the USA starting model year 1975, a guide funnel (1) is installed in filler neck.



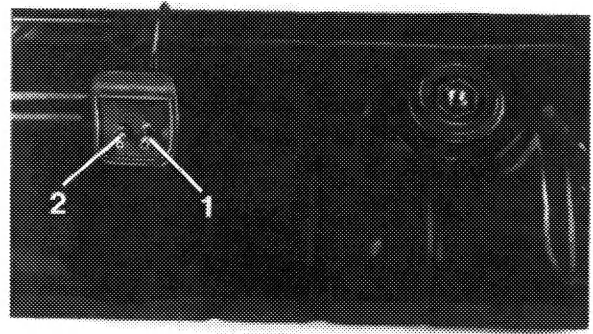
If a fuel tank is replaced on these vehicles, install a guide funnel in **the USA only**. For this purpose, place guide funnel into filler neck prior to installation of fuel tank and knock-in fastening rivets up to stop by means of a punch.



1 Fastening rivets

8 Install fuel tank in reverse order as follows:

a) Glue both gaskets to bottom of fuel tank with MB universal glue, part no. 000 989 92 71. For installation, coat both gaskets on sealing surface or bead with sliding agent (talcum, wax or the like).



- 1 Positive and negative vent line
- 2 Fuel return line

147 - 16744

b) Check whether foam rubber strips on fuel tank are tight; if required, glue down for example with MB universal glue, part no. 000 989 92 71.

c) Mount fuel tank with specified reinforcing panels and washers. Tighten fastening nuts to 20–25 Nm (2–2.5 kpm). When using self-locking nuts, tighten to 26–34 Nm (2.6–3.4 kpm).

d) Pay attention to correct seat of rubber sleeve on filler neck.

e) Mount coupler for fuel readout and check for function.